OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://brieflands.com/briefland/knowledgebase/category/tree.html#opr.html

Health Scope
Article DOI: https://doi.org/10.5812/jhealthscope.117711
Published in: Health Scope: 11(1); e117711

Peer Review Report for "Hospitalization Expenses and Influencing Factors for Inpatients with Ischemic Heart Disease in Iran: A Retrospective Study"

Author(s): Maryam Shirvani Shiri, Sara Emamgholipour Sefiddashti, Rajabali Daroudi, Maryam Tatary, Zohreh Kazemi, Hassan Karami

Review Timeline:

Submit Date: 9 Jul 2021
Revised Date: 3 Dec 2021
Accepted Date: 6 Dec 2021

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Hossein Ansari: Reviewer | **Revision** (0) — 4 Aug 2021

What is the reason for considering the period from August 2019 to May 2020?
Please mention the reference number of the first paragraph in Statistical Analysis
Please mention to frequencies along with the percents
The authors have mentioned table 4 in the text, but table 4 is not seen
please explain about model selection

Fatemeh Setoodehzadeh: Reviewer | **Revision** (0) — 28 Aug 2021

Dear Editor,
The manuscript needs revision based on the following comments:
• The manuscript should be revised by a native Expert in the English Language.
• If only direct cost gathered? Write Clearly.
• Write the implications of the study in the conclusion section
• Check the Keywords in the MeSh database.
• Background: what is IHD? Use abbreviations appropriately.

• Why only patients with Iranian health insurance have been examined?
• Method? You indicated inclusion criteria as "Patients with 0 LOS. It should be noted that if the patient is hospitalized for less than one day, it is considered as one day.
• Use of the following papers:
Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six Major Cities of Iran
The Effect of Educating Self-Care Behaviors to Patients With Heart Failure in Hospitals of Zahedan

Rohollah Kalhor: Reviewer | **Revision** (0) 1 Sep 2021

Major Revision
Dear Authors;
The scope of the study is an important issue in the field of healthcare, However, I believe the paper can be significantly improved by attending following points:

Abstract
• In abstract- method: Write about the analysis method and used software
• In abstract- result. Write the numerical amount of the impact of the effective factors
• In abstract: Conclusions are not based on research findings.
• In keywords: write keywords based on the MeSH system
Method:
• The validity and reliability of the tool haven't been reported Please write them.
• At the beginning of the Method, irrelevant content is written, which you can move to the introduction.
• There are different approaches to calculating "health care costs". Please explain in the method section exactly, what approach did you use?
• In Inclusion and Exclusion Criteria: The term "global record" is used only in Iran. Write its international equivalent.
• The use of local and uncommon terms is too much. Try to use precise scientific terms.
Results:
• In Table 3 please report about "R Square" and "Adjusted R Square" and explain these, then in the discussion section discuss these.
Discussion
• Strength points of the study are not mentioned. Please Write Strength points and complete the limitations and Explain in more detail what you did to overcome these limitations in future studies.
References:
• Some of the used references are very old and so need to be updated.
• Please correct the references to the guidelines of the journal

Eshagh Barfar: Associate Editor | **Revision** (0) 2 Sep 2021

Dear Editor in Chief
The manuscript needs major revision as follows:

Reviewer 1

Abstract

• In abstract- method: Write about the analysis method and used software

• In abstract- result: Write the numerical amount of the impact of the effective factors

• In abstract: Conclusions are not based on research findings.

• In keywords: write keywords based on the MeSH system

Method:

• The validity and reliability of the tool haven't been reported Please write them.

• At the beginning of the Method, irrelevant content is written, which you can move to the introduction.

• There are different approaches to calculating "health care costs". Please explain in the method section exactly, what approach did you use?

• In Inclusion and Exclusion Criteria: The term "global record" is used only in Iran. Write its international equivalent.

• The use of local and uncommon terms is too much. Try to use precise scientific terms.

Results:

• In Table 3 please report about "R Square" and "Adjusted R Square" and explain these, then in the discussion section discuss these.

Discussion

• Strength points of the study are not mentioned. Please Write Strength points and complete the limitations and Explain in more detail what you did to overcome these limitations in future studies.

References:

• Some of the used references are very old and so need to be updated.

• Please correct the references to the guidelines of the journal

Reviewer 2

• The manuscript should be revised by a native Expert in the English Language.

• If only direct cost gathered? Write Clearly.

• Write the implications of the study in the conclusion section

• Check the Keywords in the MeSh database.

• Background: what is IHD? Use abbreviations appropriately.

• Why only patients with Iranian health insurance have been examined?

• Method? You indicated inclusion criteria as "Patients with 0 LOS. It should be noted that if the patient is hospitalized for less than one day, it is considered as one day.

• Use of the following papers:

• Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six Major Cities of Iran

• The Effect of Educating Self-Care Behaviors Patients with Heart Failure in Hospitals of Zahedan

Reviewer 3

• What is the reason for considering the period from August 2019 to May 2020?

• Please mention the reference number of the first paragraph in Statistical Analysis

• Please mention frequencies along with the percents

• The authors have mentioned table 4 in the text, but table 4 is not seen

• please explain about model selection

Best regards

Ramazan Mirzaei: EIC | **Revision** (0) 6 Sep 2021

Dear Author

According to reviewer comments, the manuscript needs “Major revision”.
Best Regards

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Dear Editor

The authors would like to thank the editor and the reviewers for their precious time and invaluable comments. We have carefully addressed the comments. The corresponding changes and refinements made in the revised paper are summarized in our response below.

:Reviewer 1

For quality improvement of the manuscript in the introduction and discussion sections, it is :suggested to use the following paper
Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six .1 .Major Cities of Iran

Author response: *Thank you for pointing this out. Based on your suggestion, we made the necessary changes in the introduction and discussion sections. Changes are highlighted in .green*

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Hossein Ansari: Reviewer | **Revision** (1) 18 Sep 2021

The authors have revised the manuscript based on the reviewers' comments

Fatemeh Setoodehzadeh: Reviewer | **Revision** (1) 30 Sep 2021

Abstract:
As the authors mentioned, “The statistical sample of this cross-sectional study included 41357 patients with IHD who were selected from the hospital information system (HIS) of the Iran Health Insurance Organization”, therefore, why is “Iranian health insurance (β=1.21)” is a variable on expenses. You only investigated patients with Iranian health insurance. Check the results and correct them.
“41357 patients” were in Iran or a region? Declare it
The sentences are ambiguous “Regarding discharge status, completed recovery (β=0.63), Relative recovery (β=0.59), followup (β=0.51), transfer to other centers (β=0.44), Discharge against medical advice (β=0.62) had lower costs contrasted to death”. Rewrite again.
Method section. Inclusion and exclusion criteria, “) Patients whose LOS was one day or less (based on the expert’s opinion)” is inclusion or exclusion criteria? Declare this section.
Use of the following papers for quality improvement of the manuscript especially in the introduction and discussion sections.
-Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six Major Cities of Iran
-Measuring Financial Protection in Hospitalized Patients after the Health Sector Evolution Plan in Iran
-Economic Evaluation of Home Care for Stroke Patients Compared to Hospital Care: A Systematic Review

Rohollah Kalhor: Reviewer | **Revision** (1) 8 Oct 2021

Dear Editor-in-Chief
• Most of the reviewer’s comments have been applied, but to calculate the “health care costs” approach, The meaning of different approaches is the Patient (first party), Provider (second party), Purchaser (third party), or Employer (fourth party)or government or community approaches. Please explain in the method section exactly, what approach did you use? The manuscript can be published with the opinion of the editor and according to the journal's instructions.

Eshagh Barfar: Associate Editor | **Revision (1)** 9 Oct 2021

Dear editor-in-chief,
The manuscript needs minor revisions as follows:
Reviewer 1:
• Most of the reviewer's comments have been applied, but to calculate the "health care costs" approach, the meaning of different approaches is the Patient (first party), Provider (second party), Purchaser (third party), or Employer (fourth party)or government or community approaches. Please explain in the method section exactly, what approach did you use? The manuscript can be published with the opinion of the editor and according to the journal's instructions.
Reviewer 2:
Abstract:
• As the authors mentioned, "The statistical sample of this cross-sectional study included 41357 patients with IHD who were selected from the hospital information system (HIS) of the Iran Health Insurance Organization", therefore, why is "Iranian health insurance (β=1.21)" is a variable on expenses. You only investigated patients with Iranian health insurance. Check the results and correct them.
• "41357 patients" were in Iran or a region? Declare it
• The sentence is ambiguous "Regarding discharge status, completed recovery (β=0.63), Relative recovery (β=0.59), followup (β=0.51), transfer to other centers (β=0.44), Discharge against medical advice (β=0.62) had lower costs contrasted to death". Rewrite again.
Method section.
• Inclusion and exclusion criteria, ") Patients whose LOS was one day or less (based on the expert's opinion)" is inclusion or exclusion criteria? Declare this section.
Use of the following papers for quality improvement of the manuscript especially in the introduction and discussion sections:
-Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six Major Cities of Iran
-Measuring Financial Protection in Hospitalized Patients after the Health Sector Evolution Plan in Iran
-Economic Evaluation of Home Care for Stroke Patients Compared to Hospital Care: A Systematic Review

Best regards

Ramazan Mirzaei: EIC | **Revision (1)** 10 Oct 2021

Dear Author

According to reviewer comments, the manuscript need "Minor revision".
Best Regards

OPEN PEER REVIEW

Revision (2)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

The authors would like to thank the editor and the reviewers for their precious time and invaluable comments. We have carefully addressed all the comments. The corresponding changes and refinements made in the revised paper are summarized in our response below

Reviwer2:

Comment 1*: Most of the reviewer's comments have been applied, but to calculate the "health care costs" approach, the meaning of different approaches is the Patient (first party), Provider (second party), or Purchaser (third party) or Employer (fourth party) or government or community approaches. Please explain in the method section exactly, what approach did you use? The manuscript can be published with the opinion of the editor and according to the journal's instructions.*

Answer1: *it was corrected*

****Answer to comments of reviewer 2 in the manuscript was highlighted in blue color***

Reviwer3:

Comment 1: *As the authors mentioned, "The statistical sample of this cross-sectional study included 41357 patients with IHD who were selected from the hospital information system (HIS) of the Iran Health Insurance Organization", therefore, why "Iranian health insurance (β=1.21)" is a variable on expenses. You only investigated patients with Iranian health insurance. Check the results and correct them.*

Answer 1: *Our aim in this study was to compare the hospitalization costs among the 5 insurance funds of the Iran Health Insurance Organization including government employees, rural residents, Iranian health insurance, public health, and other sectors. Iranian health insurance is one of the funds of the Iran health insurance organization.*

Comment 2: *"41357 patients" were in Iran or a region? Declare it*

Answer 2: *Cost information for 41357 hospitalized patients with ischemic heart disease was collected in all Iranian hospitals. These patients were in Iran.*

Comment 3: *The sentences are ambiguous "Regarding discharge status, completed recovery (β=0.63), Relative recovery (β=0.59), follow-up (β=0.51), transfer to other centers (β=0.44), Discharge against medical advice (β=0.62) had lower costs contrasted to death". Rewrite again.*

Answer3: *it was corrected*

Comment 4: *Method section. Inclusion and exclusion criteria, Patients whose LOS was one day or less (based on the expert's opinion)" is inclusion or exclusion criteria? Declare this section.*

Answer 4: *it was corrected.*

Comment 5: *Use the following papers for quality improvement of the manuscript, especially in the introduction and discussion sections.*

Answer 5: *I have made all the necessary changes as you requested.*

****Answer to comments of reviewer 3 in the manuscript was highlighted in green color***

OPEN PEER REVIEW

Revision (2)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Fatemeh Setoodehzadeh: Reviewer | **Revision** (2) 16 Nov 2021

Dear Authors,
For quality improvement of the manuscript in the introduction and discussion sections, it is suggested to use the following paper:
1. Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six Major Cities of Iran.
Best,

Rohollah Kalhor: Reviewer | **Revision** (2) 18 Nov 2021

Dear Editor-in-Chief
• Most of the reviewer's comments have been applied. The manuscript can be published with the opinion of the editor and according to the journal's instructions.

Eshagh Barfar: Associate Editor | **Revision** (2) 20 Nov 2021

Dear Editor-in-Chief,
The manuscript needs minor revisions as follows:
For quality improvement of the manuscript in the introduction and discussion sections, it is suggested to use the following paper:
ـــ Estimation of the Number of Excess Hospitalizations Attributed to Sulfur Dioxide in Six Major Cities of Iran.

Best Regards

Ramazan Mirzaei: EIC | **Revision** (2) 23 Nov 2021

Dear Author

According to reviewer comments, the manuscript need "Minor revision".
Best Regards

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

The authors would like to thank the editor and the reviewers for their precious time and invaluable comments. We have carefully addressed all the comments. The corresponding changes and refinements made in the revised paper are summarized in our response below

Reviewer 1

Comment: *The manuscript should be revised by a native Expert in the English Language.*

Answer: *It was corrected.*
Comment: *If only direct cost was gathered? Write Clearly.*

Answer: *It was corrected. Medical Direct Costs include hospitalization and outpatient expenses, which we calculated only hospitalization costs in the present study.*

Comment: *Write the implications of the study in the conclusion section*

Answer: *It was corrected.*

Comment: *Check the Keywords in the MeSh database.*

Answer: *It was corrected.*

Comment: *Background: what is IHD? Use abbreviations appropriately.*

Answer: *It was corrected.*

Comment: *Why only patients with Iranian health insurance have been examined?*

Answer: *We examined the hospitalization costs of patients who are covered by the* Iran Health Insurance Organization because this organization has Known as the second-largest insurance organization in Iran that covers nearly half of the Iranian community and also provided the researcher with a more complete and accurate data set.

Comment: *Method? You indicated inclusion criteria as "Patients with 0 LOS. It should be noted that if the patient is hospitalized for less than one day, it is considered as one day.*

Answer: *It was corrected.*

***Answer *to comments of reviewer* 1 in the manuscript was *highlighted* in *yellow* color**

Reviewer 2:

Comment: *What is the reason for considering the period from August 2019 to May 2020?*

Answer: *We mistyped the study period in the abstract that corrected it*. Since the tariff for medical services changes every year from June in Iran and we were looking to calculate the costs with one tariff from June 21, 2020, to 21 September 2020, and the tariffs for health services were different from the tariffs of 2019, we did not study the two months. It is necessary to mention that the tariff for all healthcare services in the public and private sectors is determined by the Ministry of Health in Iran.

Comment: *Please mention the reference number of the first paragraph in Statistical Analysis*

Answer: *It was corrected.*

Comment: *Please mention frequencies along with the percent*

Answer: *It was corrected.*

Comment: *The authors have mentioned table 4 in the text, but table 4 is not seen*

Answer: *It was corrected.*

Comment: *Please explain about model selection*

Answer: *It was corrected.*

***Answer *to the comments of reviewer* 2 in the manuscript was *highlighted* in *green* color.**

Reviewer 3:

Comment: *In abstract- method: Write about the analysis method and used software*

Answer: *It was corrected.*

Comment: *In abstract- result: Write the numerical amount of the impact of the effective factors*

Answer: *It was corrected.*

Comment: *In abstract: Conclusions are not based on research findings.*

Answer: *It was corrected.*

Comment: *In keywords: write keywords based on the Mesh system*

Answer: *It was corrected.*

Comment: *The validity and reliability of the tool haven't been reported Please write them.*

Answer:

The data collection tool of the present study was a two-part checklist that included demographic information (age, sex, medical insurance) and cost information related to inpatient care (nursing and hoteling services, visit and consultation, operation room, surgical services, drugs, consumable medical supplies, imaging, laboratory tests, and rehabilitation). Since the needed information was extracted from the cost bills of patients' files. Therefore, the validity and reliability were not evaluated.

Comment: *At the beginning of the Method, irrelevant content is written, which you can move to the introduction.*

Answer: *The explanations given at the beginning of the method were not necessary, so we deleted them.*

Comment: *There are different approaches to calculating "health care costs". Please explain in the method section exactly, what approach did you use?*

Answer: *The bottom-up approach was used to calculate the costs. We extracted the micro-costs for each patient from the patient's hospital files.*

Comment: *In Inclusion and Exclusion Criteria: The term "global record" is used only in Iran. Write its international equivalent.*

Answer: The global payment system is the first example of a per-case payment system that covers about 60 common surgery for which payments are based on the average cost per case in Iran. We extracted the micro-costs for each patient from the patient's hospital files.

Comment: *The use of local and uncommon terms is too much. Try to use precise scientific terms.*

Answer: *It was corrected.*

Comment: *In Table 3 please report about "R Square" and "Adjusted R Square" and explain these, then in the discussion section discuss these.*

Answer: R2 and Adjusted R, which have the same values in this study (0.437), mean that the variables in the model were able to predict 43% of the changes in the response variable. Therefore, we could not find 57% of the dependent variable changes, and they were related to complex variables that were not present in the model. **However, our principal goal was not to make predictions, but to focus on R2 and Adjusted R. We sought to examine the relationships between variables and what factors affected the response variable (increasing or decreasing costs).**

Comment: *The strong points of the study are not mentioned. Please Write Strength points and complete the limitations and Explain in more detail what you did to overcome this limitation in future studies.*

Answer: *It was corrected.*

Comment: *Some of the used references are very old and so need to be updated.*

Answer: *It was corrected.*

Comment: *Please correct the references to the guidelines of the journal*

Answer: *It was corrected.*

***Answer *to the comments of reviewer* 1 in the manuscript was *highlighted* in *blue* color.**

OPEN PEER REVIEW

Revision (3)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Eshagh Barfar: Associate Editor | **Revision** (3) 5 Dec 2021

Dear Editor-In-Chief,
We decide to accept the manuscript for publication in the journal.
Best Regards

Ramazan Mirzaei: EIC | **Revision** (3) 6 Dec 2021

Dear Author
Your article has been accepted for publication.
Best regards